TOWN OF NUCLA, STATE OF COLORADO

ORDINANCE NO. 2013-02

AN ORDINANCE ADOPTING THE DEPARTMENT OF NATURAL RESOURCES COLORADO WATER CONSERVATION BOARD COLORADO FLOODPLAIN DAMAGE PREVENTION ORDINANCE (Rules).

RECITALS

WHEREAS, the Nucla Board of Trustees of the Town of Nucla, Colorado held a public hearing on February 13, 2013, and received evidence and testimony concerning the proposed adoption of The Department of Natural Resources, Colorado Water Conservation Board, Colorado Floodplain Damage Prevention Ordinance, all as amended herein.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF TRUSTEES OF THE TOWN OF NUCLA, COLORADO AS FOLLOWS:

- I. In order for the Town of Nucla to remain in good standing in the National Flood Insurance Program (NFIP) and eligible for certain grant funding through the Colorado Water Conservation Board (CWCB), the Rules are hereby adopted.
- II. The Rules provide higher floodplain management standards that will help our community to reduce the risks to people and property caused by flooding.
- III. By adopting the Rules, federally-backed loans, grants and other financial assistance for activities within the floodplain are available.
- IV. If a Presidential Disaster Declaration caused by flooding is made, property owners are eligible for most forms of disaster assistance.
- V. A copy of the Rules, will remain in the town hall at 320 Main Street, Nucla at all times for review and will be available by email free or hard copy for a minimal charge to residents requesting a copy.

ADOPTED THIS 27th day of February, 2013

TOWN OF NUCLA, COLORADO

Dawna, Morris, Mayor

CERTIFICATION

It is hereby found and declared by the Town of Nucla that flooding has occurred in the past within its jurisdiction and will certainly occur within the future; that flooding is likely to result in infliction of serious personal injury or death, and is likely to result in substantial injury or destruction of property within its jurisdiction; in order to effectively comply with minimum standards for coverage under the National Flood Insurance Program; and in order to effectively remedy the situation described herein, it is necessary that this ordinance become effective immediately.
Therefore, an emergency is hereby declared to exist, and this ordinance, being necessary for the immediate preservation of the public peace, health and safety, shall be in full force and effect from and after its passage and approval.
APPROVED: Dawna Morris, Mayor
PASSED: February 27, 2012
I, the undersigned, Elizabeth Smith, Town Clerk, do hereby certify that the above is a true and correct copy of an ordinance duly adopted by the Town of Nucla, at a regular meeting duly convened on February 27, 2012. Elizabeth Smith, Nucla Town Clerk
(SEAL)

DEPARTMENT OF NATURAL RESOURCES COLORADO WATER CONSERVATION BOARD

COLORADO FLOODPLAIN DAMAGE PREVENTION ORDINANCE





FLOOD DAMAGE PREVENTION ORDINANCE

TABLE OF CONTENTS

ARTICLE I - T	FITLE AND PURPOSE	1
SECTION A.	STATUTORY AUTHORIZATION	1
SECTION B.	FINDINGS OF FACT	1
SECTION C.	STATEMENT OF PURPOSE	1
SECTION D.	METHODS OF REDUCING FLOOD LOSSES	2
ARTICLE II -	DEFINITIONS	3
ARTICLE III	- GENERAL PROVISIONS	10
SECTION A.	LANDS TO WHICH THIS ORDINANCE APPLIES	10
SECTION B.	BASIS FOR ESTABLISHING THE SPECIAL FLOOD HAZARD AREA	10
SECTION C.	ESTABLISHMENT OF FLOODPLAIN DEVELOPMENT PERMIT	10
SECTION D.	COMPLIANCE	10
SECTION E.	ABROGATION AND GREATER RESTRICTIONS	10
SECTION F.	INTERPRETATION	10
SECTION G.	WARNING AND DISCLAIMER OF LIABILITY	
SECTION H.	SEVERABILITY	11
ARTICLE IV	- ADMINISTRATION	12
ARTICLE IV SECTION A.	- ADMINISTRATION DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR	12
SECTION A.	DESIGNATION OF THE FLOODPLAIN ADMINISTRATORDUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR	12 12
	DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR PERMIT PROCEDURES	
SECTION A. SECTION B.	DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR PERMIT PROCEDURES VARIANCE PROCEDURES	
SECTION A. SECTION B. SECTION C.	DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR PERMIT PROCEDURES	
SECTION A. SECTION B. SECTION C. SECTION D.	DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR PERMIT PROCEDURES VARIANCE PROCEDURES	
SECTION A. SECTION B. SECTION C. SECTION D. SECTION E.	DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR PERMIT PROCEDURES VARIANCE PROCEDURES PENALITIES FOR NONCOMPLIANCE (OPTIONAL)	
SECTION A. SECTION B. SECTION C. SECTION D. SECTION E.	DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR PERMIT PROCEDURES VARIANCE PROCEDURES PENALITIES FOR NONCOMPLIANCE (OPTIONAL) PROVISIONS FOR FLOOD HAZARD REDUCTION	
SECTION A. SECTION B. SECTION C. SECTION D. SECTION E. ARTICLE V - SECTION A.	DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR PERMIT PROCEDURES	
SECTION A. SECTION B. SECTION C. SECTION D. SECTION E.	DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR PERMIT PROCEDURES VARIANCE PROCEDURES PENALITIES FOR NONCOMPLIANCE (OPTIONAL) PROVISIONS FOR FLOOD HAZARD REDUCTION	
SECTION A. SECTION B. SECTION C. SECTION D. SECTION E. ARTICLE V - SECTION A. SECTION B.	DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR PERMIT PROCEDURES VARIANCE PROCEDURES PENALITIES FOR NONCOMPLIANCE (OPTIONAL) PROVISIONS FOR FLOOD HAZARD REDUCTION GENERAL STANDARDS SPECIFIC STANDARDS STANDARDS FOR AREAS OF SHALLOW FLOODING (AO/AH ZONES) FLOODWAYS	
SECTION A. SECTION B. SECTION C. SECTION E. ARTICLE V - SECTION A. SECTION B. SECTION C.	DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR PERMIT PROCEDURES VARIANCE PROCEDURES PENALITIES FOR NONCOMPLIANCE (OPTIONAL) PROVISIONS FOR FLOOD HAZARD REDUCTION GENERAL STANDARDS	
SECTION A. SECTION B. SECTION C. SECTION E. ARTICLE V - SECTION A. SECTION B. SECTION C. SECTION D.	DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR PERMIT PROCEDURES VARIANCE PROCEDURES PENALITIES FOR NONCOMPLIANCE (OPTIONAL) PROVISIONS FOR FLOOD HAZARD REDUCTION GENERAL STANDARDS SPECIFIC STANDARDS STANDARDS FOR AREAS OF SHALLOW FLOODING (AO/AH ZONES) FLOODWAYS	
SECTION A. SECTION B. SECTION C. SECTION E. ARTICLE V - SECTION A. SECTION B. SECTION C. SECTION D. SECTION E.	DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR PERMIT PROCEDURES VARIANCE PROCEDURES PENALITIES FOR NONCOMPLIANCE (OPTIONAL) PROVISIONS FOR FLOOD HAZARD REDUCTION GENERAL STANDARDS	

SECTION D. METHODS OF REDUCING FLOOD LOSSES

In order to accomplish its purposes, this ordinance uses the following methods:

- 1. Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in flood heights or velocities;
- 2. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- 3. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of flood waters;
- 4. Control filling, grading, dredging and other development which may increase flood damage;
- 5. Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

CHANNELIZATION - The artificial creation, enlargement or realignment of a stream channel.

CODE OF FEDERAL REGULATIONS (CFR) - The codification of the general and permanent Rules published in the Federal Register by the executive departments and agencies of the Federal Government. It is divided into 50 titles that represent broad areas subject to Federal regulation.

COMMUNITY - Any political subdivision in the state of Colorado that has authority to adopt and enforce floodplain management regulations through zoning, including, but not limited to, cities, towns, unincorporated areas in the counties, Indian tribes and drainage and flood control districts.

CONDITIONAL LETTER OF MAP REVISION (CLOMR) - FEMA's comment on a proposed project, which does not revise an effective floodplain map, that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodplain.

CRITICAL FACILITY – A structure or related infrastructure, but not the land on which it is situated, as specified in Article 5, Section H, that if flooded may result in significant hazards to public health and safety or interrupt essential services and operations for the community at any time before, during and after a flood. See Article 5, Section H.

DEVELOPMENT - Any man-made change in improved and unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

DFIRM DATABASE - Database (usually spreadsheets containing data and analyses that accompany DFIRMs). The FEMA Mapping Specifications and Guidelines outline requirements for the development and maintenance of DFIRM databases.

DIGITAL FLOOD INSURANCE RATE MAP (DFIRM) - FEMA digital floodplain map. These digital maps serve as "regulatory floodplain maps" for insurance and floodplain management purposes.

ELEVATED BUILDING - A non-basement building (i) built, in the case of a building in Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, to have the top of the elevated floor above the ground level by means of pilings, columns (posts and piers), or shear walls parallel to the flow of the water and (ii) adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood. In the case of Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, "elevated building" also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of flood waters.

EXISTING MANUFACTURED HOME PARK OR SUBDIVISION - A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the

FLOODPLAIN MANAGEMENT - The operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works and floodplain management regulations.

FLOODPLAIN MANAGEMENT REGULATIONS - Zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a floodplain ordinance, grading ordinance and erosion control ordinance) and other applications of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

FLOOD CONTROL STRUCTURE - A physical structure designed and built expressly or partially for the purpose of reducing, redirecting, or guiding flood flows along a particular waterway. These specialized flood modifying works are those constructed in conformance with sound engineering standards.

FLOODPROOFING - Any combination of structural and/or non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

FLOODWAY (**REGULATORY FLOODWAY**) - The channel of a river or other watercourse and adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. The Colorado statewide standard for the designated height to be used for all newly studied reaches shall be one-half foot (six inches). Letters of Map Revision to existing floodway delineations may continue to use the floodway criteria in place at the time of the existing floodway delineation.

FREEBOARD - The vertical distance in feet above a predicted water surface elevation intended to provide a margin of safety to compensate for unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood such as debris blockage of bridge openings and the increased runoff due to urbanization of the watershed.

FUNCTIONALLY DEPENDENT USE - A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

HIGHEST ADJACENT GRADE – The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

HISTORIC STRUCTURE - Any structure that is:

- 1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- 2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

MATERIAL SAFETY DATA SHEET (MSDS) — A form with data regarding the properties of a particular substance. An important component of product stewardship and workplace safety, it is intended to provide workers and emergency personnel with procedures for handling or working with that substance in a safe manner, and includes information such as physical data (melting point, boiling point, flash point, etc.), toxicity, health effects, first aid, reactivity, storage, disposal, protective equipment, and spill-handling procedures.

NATIONAL FLOOD INSURANCE PROGRAM (NFIP) – FEMA's program of flood insurance coverage and floodplain management administered in conjunction with the Robert T. Stafford Relief and Emergency Assistance Act. The NFIP has applicable Federal regulations promulgated in Title 44 of the Code of Federal Regulations. The U.S. Congress established the NFIP in 1968 with the passage of the National Flood Insurance Act of 1968.

NEW MANUFACTURED HOME PARK OR SUBDIVISION - A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by a community.

NO-RISE CERTIFICATION – A record of the results of an engineering analysis conducted to determine whether a project will increase flood heights in a floodway. A No-Rise Certification must be supported by technical data and signed by a registered Colorado Professional Engineer. The supporting technical data should be based on the standard step-backwater computer model used to develop the 100-year floodway shown on the Flood Insurance Rate Map (FIRM) or Flood Boundary and Floodway Map (FBFM).

PHYSICAL MAP REVISION (PMR) - FEMA's action whereby one or more map panels are physically revised and republished. A PMR is used to change flood risk zones, floodplain and/or floodway delineations, flood elevations, and/or planimetric features.

RECREATIONAL VEHICLE - means a vehicle which is:

- 1. Built on a single chassis;
- 2. 400 square feet or less when measured at the largest horizontal projections;
- 3. Designed to be self-propelled or permanently towable by a light duty truck; and
- 4. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

SPECIAL FLOOD HAZARD AREA – The land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year, i.e., the 100-year floodplain.

START OF CONSTRUCTION - The date the building permit was issued, including substantial improvements, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation

ARTICLE III - GENERAL PROVISIONS

SECTION A. LANDS TO WHICH THIS ORDINANCE APPLIES

The ordinance shall apply to all Special Flood Hazard Areas and areas removed from the floodplain by the issuance of a FEMA Letter of Map Revision Based on Fill (LOMR-F) within the jurisdiction of Town of Nucla, Colorado.

SECTION B. BASIS FOR ESTABLISHING THE SPECIAL FLOOD HAZARD AREA

The Special Flood Hazard Areas identified by the Federal Emergency Management Agency in a scientific and engineering report entitled, "The Flood Insurance Study for Montrose County, Colorado and Incorporated Areas," dated January 6, 2012, with accompanying Flood Insurance Rate Maps and/or Flood Boundary-Floodway Maps (FIRM and/or FBFM) and any revisions thereto are hereby adopted by reference and declared to be a part of this ordinance. These Special Flood Hazard Areas identified by the FIS and attendant mapping are the minimum area of applicability of this ordinance and may be supplemented by studies designated and approved by the Town of Nucla trustees. The Floodplain Administrator shall keep a copy of the Flood Insurance Study (FIS), DFIRMs, FIRMs and/or FBFMs on file and available for public inspection.

SECTION C. ESTABLISHMENT OF FLOODPLAIN DEVELOPMENT PERMIT

A Floodplain Development Permit shall be required to ensure conformance with the provisions of this ordinance.

SECTION D. COMPLIANCE

No structure or land shall hereafter be located, altered, or have its use changed within the Special Flood Hazard Area without full compliance with the terms of this ordinance and other applicable regulations. Nothing herein shall prevent the Town of Nucla trustees from taking such lawful action as is necessary to prevent or remedy any violation. These regulations meet the minimum requirements as set forth by the Colorado Water Conservation Board and the National Flood Insurance Program.

SECTION E. ABROGATION AND GREATER RESTRICTIONS

This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another ordinance, easement, covenant, nor deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

SECTION F. INTERPRETATION

In the interpretation and application of this ordinance, all provisions shall be:

- 1. Considered as minimum requirements;
- 2. Liberally construed in favor of the governing body; and
- 3. Deemed neither to limit nor repeal any other powers granted under State statutes.

ARTICLE IV - ADMINISTRATION

SECTION A. DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR

The Town of Nucla Mayor is hereby appointed as Floodplain Administrator to administer, implement and enforce the provisions of this ordinance and other appropriate sections of 44 CFR (National Flood Insurance Program Regulations) pertaining to floodplain management.

SECTION B. DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR

Duties and responsibilities of the Floodplain Administrator shall include, but not be limited to, the following:

- 1. Maintain and hold open for public inspection all records pertaining to the provisions of this ordinance, including the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures and any floodproofing certificate required by Article 4, Section C.
- 2. Review, approve, or deny all applications for Floodplain Development Permits required by adoption of this ordinance.
- 3. Review Floodplain Development Permit applications to determine whether a proposed building site, including the placement of manufactured homes, will be reasonably safe from flooding.
- 4. Review permits for proposed development to assure that all necessary permits have been obtained from those Federal, State or local governmental agencies (including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334) from which prior approval is required.
- 5. Inspect all development at appropriate times during the period of construction to ensure compliance with all provisions of this ordinance, including proper elevation of the structure.
- 6. Where interpretation is needed as to the exact location of the boundaries of the Special Flood Hazard Area (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Floodplain Administrator shall make the necessary interpretation.
- 7. When Base Flood Elevation data has not been provided in accordance with Article 3, Section B, the Floodplain Administrator shall obtain, review and reasonably utilize any Base Flood Elevation data and Floodway data available from a Federal, State, or other source, in order to administer the provisions of Article 5.
- 8. For waterways with Base Flood Elevations for which a regulatory Floodway has not been designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one-half foot at any point within the community.

- 4. The compatibility of the proposed use with existing and anticipated development;
- 5. The safety of access to the property in times of flood for ordinary and emergency vehicles;
- 6. The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical and water systems;
- 7. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site;
- 8. The necessity to the facility of a waterfront location, where applicable;
- 9. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
- 10. The relationship of the proposed use to the comprehensive plan for that area.

SECTION D. VARIANCE PROCEDURES

- 1. The Appeal Board, as established by the Community, shall hear and render judgment on requests for variances from the requirements of this ordinance.
- 2. The Appeal Board shall hear and render judgment on an appeal only when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the enforcement or administration of this ordinance.
- 3. Any person or persons aggrieved by the decision of the Appeal Board may appeal such decision in the courts of competent jurisdiction.
- 4. The Floodplain Administrator shall maintain a record of all actions involving an appeal and shall report variances to the Federal Emergency Management Agency upon request.
- 5. Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in Section C of this Article have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
- 6. Upon consideration of the factors noted above and the intent of this ordinance, the Appeal Board may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this ordinance as stated in Article 1, Section C.
- 7. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- 8. Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's

ARTICLE V - PROVISIONS FOR FLOOD HAZARD REDUCTION

SECTION A. GENERAL STANDARDS

In all Special Flood Hazard Areas the following provisions are required for all new construction and substantial improvements:

- 1. All new construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
- 2. All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
- 3. All new construction or substantial improvements shall be constructed with materials resistant to flood damage;
- 4. All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
- 5. All manufactured homes shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces.
- 6. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- 7. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into flood waters; and,
- 8. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

SECTION B. SPECIFIC STANDARDS

In all Special Flood Hazard Areas where base flood elevation data has been provided as set forth in (i) Article 3, Section B, (ii) Article 4, Section B(7), or (iii) Article 5, Section G, the following provisions are required:

1. RESIDENTIAL CONSTRUCTION

New construction and Substantial Improvement of any residential structure shall have the lowest floor (including basement), electrical, heating, ventilation, plumbing, and air

equipment and other service facilities (including ductwork), are elevated to one foot above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

All manufactured homes placed or substantially improved on sites in an existing manufactured home park or subdivision within Zones A1-30, AH and AE on the community's FIRM that are not subject to the provisions of the above paragraph, shall be elevated so that either:

- a. The lowest floor of the manufactured home, electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork), are one foot above the base flood elevation, or
- b. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

5. RECREATIONAL VEHICLES

All recreational vehicles placed on sites within Zones A1-30, AH, and AE on the community's FIRM either:

- a. Be on the site for fewer than 180 consecutive days,
- b. Be fully licensed and ready for highway use, or
- c. Meet the permit requirements of Article 4, Section C, and the elevation and anchoring requirements for "manufactured homes" in paragraph (4) of this section.

A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

6. PRIOR APPROVED ACTIVITIES

Any activity for which a Floodplain Development Permit was issued by the Town of Nucla or a CLOMR was issued by FEMA prior to February 27, 2013 may be completed according to the standards in place at the time of the permit or CLOMR issuance and will not be considered in violation of this ordinance if it meets such standards.

SECTION C. STANDARDS FOR AREAS OF SHALLOW FLOODING (AO/AH ZONES)

Located within the Special Flood Hazard Area established in Article 3, Section B, are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of 1 to 3 feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow; therefore, the following provisions apply:

3. Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in Base Flood Elevations, provided that the community first applies for a CLOMR and floodway revision through FEMA.

SECTION E. ALTERATION OF A WATERCOURSE

For all proposed developments that alter a watercourse within a Special Flood Hazard Area, the following standards apply:

- 1. Channelization and flow diversion projects shall appropriately consider issues of sediment transport, erosion, deposition, and channel migration and properly mitigate potential problems through the project as well as upstream and downstream of any improvement activity. A detailed analysis of sediment transport and overall channel stability should be considered, when appropriate, to assist in determining the most appropriate design.
- 2. Channelization and flow diversion projects shall evaluate the residual 100-year floodplain.
- 3. Any channelization or other stream alteration activity proposed by a project proponent must be evaluated for its impact on the regulatory floodplain and be in compliance with all applicable Federal, State and local floodplain rules, regulations and ordinances.
- 4. Any stream alteration activity shall be designed and sealed by a registered Colorado Professional Engineer or Certified Professional Hydrologist.
- 5. All activities within the regulatory floodplain shall meet all applicable Federal, State and the Town of Nucla floodplain requirements and regulations.
- 6. Within the Regulatory Floodway, stream alteration activities shall not be constructed unless the project proponent demonstrates through a Floodway analysis and report, sealed by a registered Colorado Professional Engineer, that there is not more than a 0.00-foot rise in the proposed conditions compared to existing conditions Floodway resulting from the project, otherwise known as a No-Rise Certification, unless the community first applies for a CLOMR and Floodway revision in accordance with Section D of this Article.
- 7. Maintenance shall be required for any altered or relocated portions of watercourses so that the flood-carrying capacity is not diminished.

SECTION F. PROPERTIES REMOVED FROM THE FLOODPLAIN BY FILL

A Floodplain Development Permit shall not be issued for the construction of a new structure or addition to an existing structure on a property removed from the floodplain by the issuance of a FEMA Letter of Map Revision Based on Fill (LOMR-F), unless such new structure or addition complies with the following:

1. RESIDENTIAL CONSTRUCTION

The lowest floor (including basement), electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork), must be elevated to one foot above the Base Flood Elevation that existed prior to the placement of fill.

2. NONRESIDENTIAL CONSTRUCTION

The lowest floor (including basement), electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork), must be elevated to

These facilities consist of:

- i. Public safety (police stations, fire and rescue stations, emergency vehicle and equipment storage, and, emergency operation centers);
- ii. Emergency medical (hospitals, ambulance service centers, urgent care centers having emergency treatment functions, and non-ambulatory surgical structures but excluding clinics, doctors offices, and non-urgent care medical structures that do not provide these functions);
- iii. Designated emergency shelters;
- iv. Communications (main hubs for telephone, broadcasting equipment for cable systems, satellite dish systems, cellular systems, television, radio, and other emergency warning systems, but excluding towers, poles, lines, cables, and conduits);
- v. Public utility plant facilities for generation and distribution (hubs, treatment plants, substations and pumping stations for water, power and gas, but not including towers, poles, power lines, buried pipelines, transmission lines, distribution lines, and service lines); and
- vi. Air Transportation lifelines (airports (municipal and larger), helicopter pads and structures serving emergency functions, and associated infrastructure (aviation control towers, air traffic control centers, and emergency equipment aircraft hangars).

Specific exemptions to this category include wastewater treatment plants (WWTP), non-potable water treatment and distribution systems, and hydroelectric power generating plants and related appurtenances.

Public utility plant facilities may be exempted if it can be demonstrated to the satisfaction of the Town of Nucla trustees that the facility is an element of a redundant system for which service will not be interrupted during a flood. At a minimum, it shall be demonstrated that redundant facilities are available (either owned by the same utility or available through an intergovernmental agreement or other contract) and connected, the alternative facilities are either located outside of the 100-year floodplain or are compliant with the provisions of this Article, and an operations plan is in effect that states how redundant systems will provide service to the affected area in the event of a flood. Evidence of ongoing redundancy shall be provided to the Town of Nucla trustees on an as-needed basis upon request.

b. Hazardous materials facilities include facilities that produce or store highly volatile, flammable, explosive, toxic and/or water-reactive materials.

These facilities may include:

- i. Chemical and pharmaceutical plants (chemical plant, pharmaceutical manufacturing);
- ii. Laboratories containing highly volatile, flammable, explosive, toxic and/or water-reactive materials;
- iii. Refineries:
- iv. Hazardous waste storage and disposal sites; and
- v. Above ground gasoline or propane storage or sales centers.

ii. Essential structures for public colleges and universities (dormitories, offices, and classrooms only).

These facilities may be exempted if it is demonstrated to the Town of Nucla trustees that the facility is an element of a redundant system for which service will not be interrupted during a flood. At a minimum, it shall be demonstrated that redundant facilities are available (either owned by the same entity or available through an intergovernmental agreement or other contract), the alternative facilities are either located outside of the 100-year floodplain or are compliant with this ordinance, and an operations plan is in effect that states how redundant facilities will provide service to the affected area in the event of a flood. Evidence of ongoing redundancy shall be provided to the Town of Nucla trustees on an as-needed basis upon request.

2. PROTECTION FOR CRITICAL FACILITIES

All new and substantially improved Critical Facilities and new additions to Critical Facilities located within the Special Flood Hazard Area shall be regulated to a higher standard than structures not determined to be Critical Facilities. For the purposes of this ordinance, protection shall include one of the following:

- a. Location outside the Special Flood Hazard Area; or
- b. Elevation of the lowest floor or floodproofing of the structure, together with attendant utility and sanitary facilities, to at least two feet above the Base Flood Elevation.

3. INGRESS AND EGRESS FOR NEW CRITICAL FACILITIES

New Critical Facilities shall, when practicable as determined by the Town of Nucla trustees, have continuous non-inundated access (ingress and egress for evacuation and emergency services) during a100-year flood event.